

BHP Newman Main Line (Australia)



Project description

As the largest mining company in the world by market capitalization, the Melbourne-based BHP depends heavily on the network of railway lines that serve its mining facilities throughout Australia, transporting enormous quantities of the mined minerals needed by the world's developed and developing economies.

So when the bridges on these railway lines require renovation, disruption to rail traffic must be kept to an absolute minimum.

Consequently, bridge renovation works must be planned in great detail and with a very strong focus on reliability – with respect to the supply and the installation of the bearings in particular, as well as in relation to long-term performance once installed.

The project is located in the Pilbara region of Western Australia



mageba scope

The owner sought a supplier who is capable of providing bearings that are locally designed and manufactured in Australia with NATA accreditation and has thorough experience in replacing bearings.

With extensive experience on bearing replacement projects all around the world over a period of several decades, mageba was selected to supply 244 Australian made RESTON®SPHERICAL bearings with a maximum vertical load of 4,200 kN.

Before installation, the bearings were tested as specified at mageba's NATA- and NACE accredited in-house testing facility in Sydney.

Despite the difficulties caused by the COVID-19 crisis, the bearings were transported to site in time, and installed during the very limited track closures.

Assembly of bearings (here of the fixed type) at mageba's Australian facility in New South Wales



Highlights & Facts

mageba products:

Type: RESTON®SPHERICAL bearings
Installation: 2021

Structure:

Region: Pilbara
Country: Australia
Type: Railway line
Length: 426 km
Owner: BHP
Contractor: Monadelphous Group Limited
Designer: BG&E

A RESTON®SPHERICAL bearing following installation to replace an existing bearing of a different type

